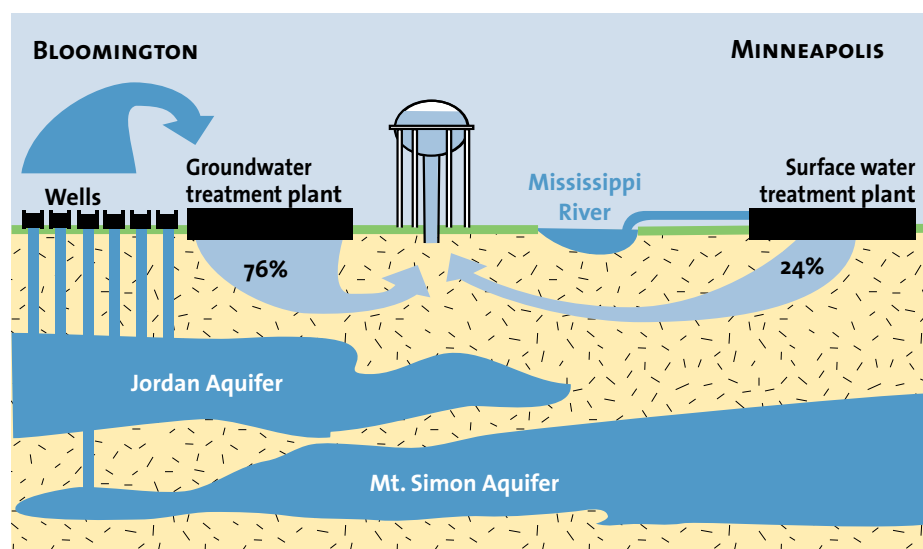


## WHERE DOES YOUR TAP WATER COME FROM?



In 1999, the National Resources Defense Council (NRDC) published the results of a four-year study in which researchers tested more than 1,000 samples of 103 brands of bottled water. These researchers found that, “An estimated 25 percent or more of bottled water is really just tap water in a bottle – sometimes further treated, sometimes not.”

Also, while municipal water systems must test for harmful microbiological content in water several times a day, bottled water companies are required to test for these microbes only once a week. Alarmingly, the 1999 NRDC study found that 18 of the 103 bottled water brands tested contained, in at least one sample, “more bacteria than allowed under microbiological-purity guidelines.”

WATER FACTS © ALLABOUTWATER.ORG.

**R**emodeled in 2002, the Sam H. Hobbs Water Treatment Plant can produce up to 14 million gallons of treated, drinkable water per day.

### BLOOMINGTON WELLS 76 PERCENT IN 2010

The City’s water plant draws raw (untreated) groundwater from six deep wells. The wells extend downward between 376 and 963 feet into the Jordan, Prairie du Chien-Jordan, Franconia-Mount Simon and Jordan-St. Lawrence Aquifers, porous underground rock formations that hold vast amounts of water. The Midwest has a very rich water supply.

The City drew 3.1 billion gallons of water, 76 percent of Bloomington’s needs, from these deep groundwater wells in 2010.

### MISSISSIPPI RIVER 24 PERCENT IN 2010

To meet demand in excess of our production capabilities during peak periods, Bloomington purchases treated water from the city of Minneapolis. Treated water from our plant is blended with similarly treated water from Minneapolis and sent throughout Bloomington’s distribution system. All of our consumers receive a blend of water from these two sources.

Minneapolis’ surface water treatment plant takes its raw water from the Mississippi River. In 2010, the City purchased 0.9 billion gallons of water from Minneapolis, which supplied the remaining 24 percent of our water needs.

**WEBSITE KEYWORDS:**  
**WATER TREATMENT PLANT.**

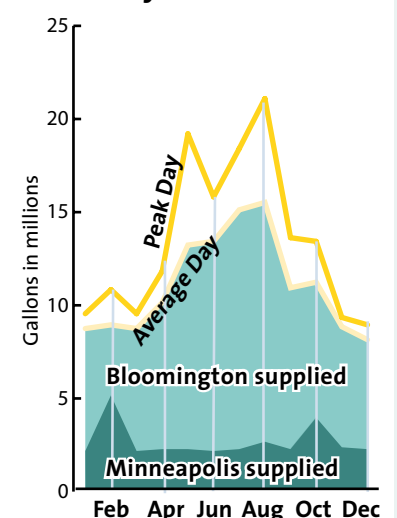
## HOW MUCH IS USED?

In 2010, residents and businesses in Bloomington used 4.0 billion gallons of water, 600 million less than 2009. The average was 11.0 million gallons of water per day last year.

The chart below shows the peak day and average day of water use for each month during 2010, as well as the average amount of water treated at the City’s plant and purchased from Minneapolis. To get a more accurate picture of the actual amounts of water consumed, peak day data was adjusted to account for fluctuations in our reservoir levels.

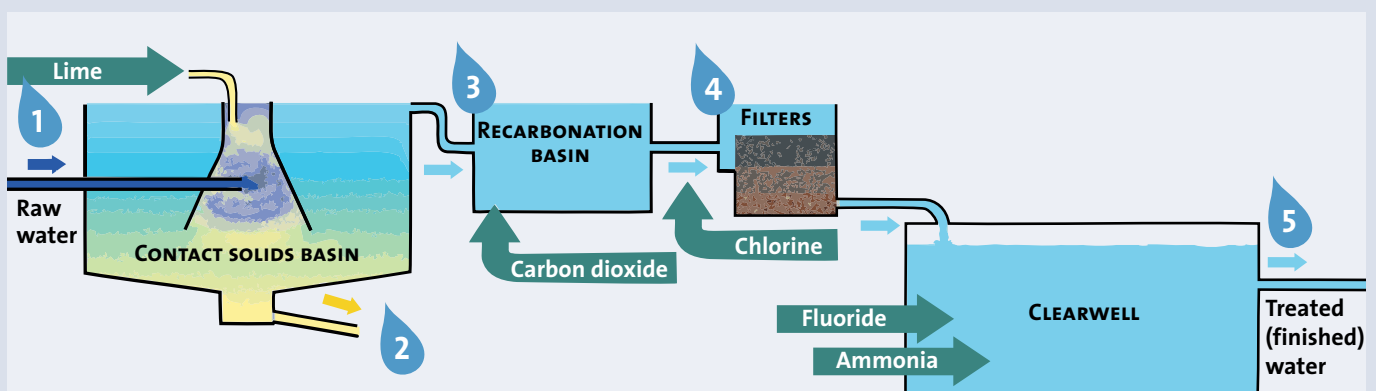
**WEBSITE KEYWORDS: WATER USAGE.**

### 2010 Daily water use



## OUR WATER TREATMENT PROCESS

- The softening process begins when lime, in the form of slakened quicklime, is mixed with raw water in one of the City’s two contact solids basins. Each basin holds about half a million gallons of water.
- The lime-and-water mixture causes the pH in the basins to rise, and calcium and magnesium (the main components of hardness) to form insoluble particles called flocs. As these floc particles grow in size, they settle to the bottom of the contact solids basins. The solids are removed, dewatered and used as a USDA-approved source of lime by Minnesota farmers to stabilize the pH in farm fields.
- The water enters a recarbonation basin where it is adjusted to the proper pH by adding carbon dioxide. A precise amount of chlorine is added to discourage bacterial growth as the water travels through the City’s distribution system.
- The water is filtered to remove any remaining particles. Then it enters an underground reservoir called a clearwell where small quantities of fluoride and ammonia are added. Because fluoride promotes strong teeth and bones, fluoridation is mandated by State law at a dosage of 0.9 - 1.5 ppm. Ammonia works with the chlorine as a disinfectant. Now softened and disinfected, the water is ready for use by residents and businesses.



## IS THE WATER SOFT?

Bloomington is one of the few water utilities in Minnesota that supplies softened water, saving consumers time and money. Untreated groundwater enters the water plant with a hardness of about 19 grains (320 parts per million). Our treatment process reduces the water’s hardness to about 5.2 grains (90 parts per million).

- The finished water from the City’s treatment plant is pumped into the distribution system, where it is mixed with treated water purchased from the city of Minneapolis.

**WEBSITE KEYWORDS: TREATMENT PROCESS.**

## St. Cloud Technical College

### A CAREER IN THE WATER INDUSTRY IS WAITING FOR YOU!

St. Cloud Technical College’s Water Environment Technologies (WETT) program provides you with the skills you need to land a great job in this rapidly growing industry.

There are many benefits to this program:

- Hands-on learning.
- 12-month program.
- Metro and St. Cloud locations.
- 95 percent placement rates.

For more information on this career program, call St. Cloud Technical and Community College at 1-320-308-5952 or e-mail instructor Bill Spain at [bspain@sctcc.edu](mailto:bspain@sctcc.edu).